



**JPL**

## Infrared Spectrograph (IRS)

**SIRTF**

◆ **PI** - Jim Houck, Cornell University

◆ **Contractor** - Ball Aerospace

◆ **Key Features**

- *R=600 spectroscopy, 10-40 $\mu$ m; R=50 spectroscopy, 5-40 $\mu$ m*
- *Uses 128x128 Boeing Si:As and Si:Sb IBC arrays*
- *No moving parts*
- *Two R=600 modules [10-20, 20-40 $\mu$ m] operate in echelle mode*
- *Two R=50 modules [5-15, 15-40 $\mu$ m] operate in long-slit mode*
  - ◆ Order sorting accomplished by filters on lo-res slits
- *Peak-up imaging at 15 $\mu$ m incorporated into short-lo module*
  - ◆ Allows acquisition of sources with poorly known positions
  - ◆ Can be used with any module, or independently for photometry
- *Operates in staring and scanning modes*
- *Prototype has been used at Palomar observatory*

◆ **Performance:**

- *Measures complete spectrum of any IRAS source in just a few minutes*